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## On the Occurrence of *Psychothoe duvauceli* (Bsd.) in North Thailand (*Ctenuchidae*, *Lepidoptera*)<sup>1</sup>

Muhabbet Kemal<sup>2</sup> Ahmet Ö Koçak<sup>2</sup> Paitoon Leksawasdi<sup>3</sup>

**Abstract:** Kemal,M., Koçak,A.Ö. & P.Leksawasdi, On the Occurrence of *Psychothoe duvauceli* (Bsd.) in North Thailand (*Ctenuchidae*, *Lepidoptera*). *Cent. ent. Stud., Misc. Pap.* 105: 1-3, 3 figs.

This article deals with the occurrence of the species *Psychothoe duvauceli* (Boisduval) in North Thailand (*Ctenuchidae*). Habitat preference and flight activity of the species is described, illustrated and discussed.

**Keywords:** *Psychothoe duvauceli*, *Ctenuchidae*, *Lepidoptera*, new record, North Thailand

The family *Ctenuchidae* is one of the most little known group of *Lepidoptera* in Thailand. The first attempt to the moth fauna of this country has been made by Tams (1924) based mostly on the material collected by Mr. E. J. Godfrey, also by H. R. H. Prince of Chumporn, Mr. W. A. Graham, and Major C. H. Stockey on a trip from Burma through Siam. Tams (1924) listed only three species of *Ctenuchidae* on 6 males & females, namely, *Amata sprebius* (Fabricius) from Chumporn, *Eressa confinis* (Walker) from Bangkok, and *Euchromia elegantissima* (Wallengren) from Klong Sam, Bangkok. In the latest and comprehensive list, Hutacharern & Tubtim (1995) mentioned only 10 species of this family from Thailand, without information on the provinces, and collecting sites. These species are as follows: *Amata albifrons* Moore, *A. celebesa gracilis* Rob., *A. compta* (Walker), *A. grotei* Moore, *A. sprebius* (Fabricius), *Cryximo anartina* Butler, *Eressa ichneumoniformes* Rothschild, *Euchromia polymena elegantissima* Wallengren, *E. p. siamensis* Butler, and *Syntomis divisa* Walker.

Comparing with the other well known faunal regions in the Orientalic part of Asia, it can be said that the Thailand *Ctenuchidae* fauna is still very poorly known, as it has only 20 species so far. (cf. Borneo, 57 species, Holloway, 1988; Cesa Databank).

*Psychothoe* was established by Boisduval in 1829 on the species *P. duvauceli* Boisduval. Two species have been known so far, one is *P. gnatula* Bsd. from South Africa and other *P. duvauceli* Bsd. in South East Asia, ranging from Sind (Pakistan and India), and Myanmar. The species is *duvauceli* has been illustrated in Seitz vol 10, pl. 10 fig.a (Fig.1).

During the field observations, the first author observed males of *P. duvauceli* Bsd. in places rich in grass in early mornings of 1-4.4.2006, later on 8.4.2006 (Fig.2). The living place of this species has been greatly changed by human activities in the Campus. The present appearance is somewhat a

<sup>1</sup> Results of the Memorandum between ISTRD (CMU) and the CESA, Nr. 5

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park surrounded by some Palms and other tropical fruit trees. The wet ground covered by dominantly grasses with sporadically other plant species of *Asteraceae*.

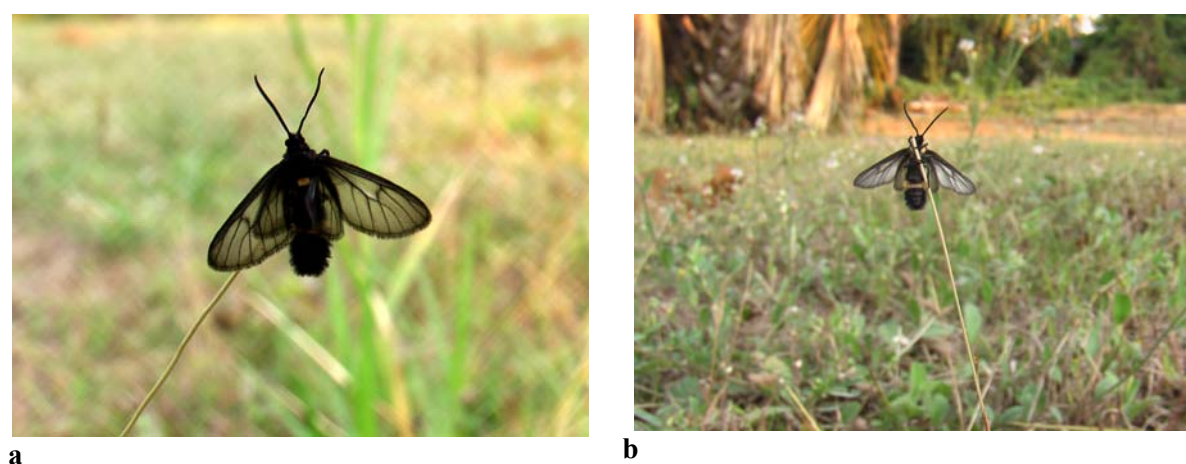


**Fig. 1-** Classical illustrations of two *Psychothoe* species. a) *P. duvauceli* Bsd. (ex Seitz, vol.10, pl.10 fig.a), b. *C. naclioides* R.Felder & Rogenhofer, pl.102 fig.3 from Natal (currently treated as junior synonym of *P. gnatula* Bsd.).



**Fig. 2 a,b** – Habitat of *Psychothoe duvauceli* Bsd. in Chiang Mai University Campus (photos by M. Kemal on 8.4.2006).

The characteristics of this species shown in fig.1 is black but semitransparent wings, shape of abdomen with two well marked yellow rings. These features are also remarkably represented in newly recorded specimens (Fig.3).



**Fig. 3 -** *Psychothoe duvauceli*. a – Upperside of male, Thailand Chiang Mai University Campus 350m site code Cu07, 1 4 2006, M. Kemal leg. photo A. Kocak; b, c - at rest in nature, photos by M. Kemal at the same place, 6 4 2006.

This species is a weak day-flier moth. It seems that the main flying season is in April. It is frequently observed early in the morning between 7-9 a.m.

**Literature:**

- Barlow, H.S.**, 1982, An Introduction to the Moths of South East Asia. x+305pp., 50 Pls., 72 figs. Kuala Lumpur.
- Bryk, F.**, 1912, Syntomidae. [in] Wagner, H., Lepidopterorum Catalogus Pars 7. 179pp. Dr. W. Junk Berlin.
- Butler, G.**, 1876, Notes on the Lepidoptera of the family Zygaenidae with descriptions of new genera and species. J. linn. Soc. Lond., Zool. 12: 342-406, pls. xxvii-xxviii
- Fabricius, J.C.**, 1775, Systema Entomologiae sistens Insectorum classes, ordines, genera, species, adjectis synonymis, locis, descriptionibus, observationibus. 832 pp. Flensburgi et Lipsiae.
- Fabricius, J.C.**, 1787, Mantissa Insectorum. vol. 1 xx+348 pp., vol. 2, 382pp. Hafniae.
- Felder, C., Felder, R. & A.F. Rogenhofer**, 1864-[1875], Reise der Österreichischen Fregatte Novarra um die Erde. (2) (Atlas) 20pp.+ 140Pls. Wien.
- Hampson, G.F.**, 1911, Descriptions of new genera and species of Syntomidae, Arctiidae, Agaristidae, and Noctuidae. Ann. Mag. nat. Hist. (8) 8: 393-445.
- Holloway, J.D.**, 1988, The Moths of Borneo Part 6 Arctiidae, Syntomini, Euchrominae, Arctiinae, Aganinae (to Noctuidae). 101 pp. figs. 6 Pls. Kuala Lumpur.
- Hutacharern, C. & N. Tubtim**, 1995, Checklist of forest insects in Thailand. 392 pp., figs. Office of Environmental Policy and Planning, Biodiversity Series volume one, Bangkok.
- Hübner, J.**, 1816-[1826], Verzeichnis bekannter Schmetterlinge. 431 pp., Augsburg.
- Kitching, I. & K. Tuck**, 1996, Butterflies [in] Leksawasdi, P., The study and survey of biodiversity at Chiang Dao Wildlife Sanctuary. Final Report: 168-180. The Environmental Policy and Plan Office, Bangkok [unpublished].
- Minet, J.**, 1986, Ebauche d'une classification moderne de l'ordre des Lépidoptères. Alexanor 14: 291-313.
- Minet, J.**, 1991, Tentative reconstruction of the ditrysian phylogeny (Lepidoptera: Glossata). Ent. scand. 22: 69-95.
- Obratsov, N.S.**, 1966, Die palaearktischen Amata-Arten (Lepidoptera, Ctenuchidae). Veröff. zool. Stsaml. München 10: 1-383, Taf.
- Robinson, G.S., Ackery, P.R., Kitching, I.J., Beccaloni, G.W. & L.M. Hernandez**, 2005, Hosts - a database of hostplants of the World's Lepidoptera (<http://intern.nhm.ac.uk/jdsml/research-curation/projects/hostplants/index.dsml>) Natural History Museum, London.
- Tams, W.H.T.**, 1924, List of the moth collected in Siam by E.J. Godfrey B.S.C., F.E.S. J. Nat. Hist. Soc. Siam 6 (3): 229-289, pl. 17.

## A Replacement name for a Hawaiian Moth (*Tortricidae*, *Lepidoptera*)

**Ahmet Ömer Koçak   Muhabbet Kemal**

**Abstract:** Koçak, A. Ö. & M. Kemal, A replacement name for a Hawaiian moth (*Tortricidae*, *Lepidoptera*). *Cent. ent. Stud., Misc. Pap.* 105: 3-4.

This article deals with the nomenclature of *Bradleyella* Zimmermann, 1978 from Hawaii Islands in the family *Tortricidae*. A new name *Nuritamburia* is proposed for *Bradleyella* Zimmermann, 1978 (preoccupied) in accordance with the ICZN.

**Keywords:** *Bradleyella*, *Nuritamburia*, *Tortricidae*, *Lepidoptera*, new name, Hawaii Islands.

### *Tortricidae* *Archipini*

#### ***Nuritamburia* nom. nov.**

*Bradleyella* Zimmermann, 1978 (Insect of Hawaii 9: 507) is invalid as it is junior homonym of *Bradleyella* Krombein, 1963, published in Nova Guinea (Zool.) 22: 629 [*Hymenoptera*]. No available synonym exists in the genus (cf. Brown, 2005: 161). Therefore, we propose here a replacement name *Nuritamburia* (nom. nov.) for *Bradleyella* Zimmermann, 1978 nec *Bradleyella* Krombein, 1963, in accordance with the ICZN.

The necessary name combinations are mentioned below:

*Nuritamburia chlorocalla* (Walsingham,1907) (**comb.n.**) [type-species]  
*Nuritamburia metallurgica* (Walsingham,1907) (**comb.n.**)  
*Nuritamburia phyllanthana* (Swezey,1940) (**comb.n.**)  
*Nuritamburia semicineriana* (Swezey,1913) (**comb.n.**)  
*Nuritamburia thoracina* (Walsingham,1907) (**comb.n.**)

Range: Hawaii Islands.

### Literature

Brown,J.W., 2005, *World Catalogue of Insects Tortricidae (Lepidoptera)*. Volume 5. Apollo Books. Stenstrup.

## Notes on the nomenclature of Asiatic Butterflies (Lepidoptera)

Ahmet Ö. Koçak   Muhabbet Kemal

**Abstract:** Koçak, A. Ö. & M. Kemal, Notes on the nomenclature of Asiatic butterflies (*Lepidoptera*). *Cent. ent. Stud., Misc. Pap.* 105: 4-5.

This article deals with the nomenclature of *Graphium phidias* (Oberthür,1896) (*Papilionidae*) from Laos and Vietnam and Section *Himalaya* Koçak & Seven,1998 in the genus *Polyommatus* Latreille (*Lycaenidae*) from China, India, and Pakistan. Two replacement names are proposed for the pre-occupied names in accordance with the ICZN.

**Keywords:** *Graphium akikoe muhabbet*, *Himalaya*, *Mestore*, *Lycaenidae*, *Lepidoptera*, new names, China, Tibet, Ladak, Kashmir, India, Pakistan, Nepal, Laos, Vietnam.

### Papilionidae

***Graphium akikoe*** Morita & Shinkai,1996

*Graphium phidias* ssp. *akikoe* Morita & Shinkai,1996, Futao 23: 9-11, pl.4 figs.7,8. Type-locality: Laos.

**ssp. *muhabbet* nom. nov. Koçak**

The first author proposes a replacement name ssp. *muhabbet*<sup>4</sup> for the name *Papilio phidias* Oberthür,1896 (Bull. ent. Soc. Fr. 1896: 156) preoccupied by *Papilio phidias* Linnaeus,1764 non *Papilio phidias* Cramer,1779 (*Hesperiiidae*).

This taxon is currently considered as being valid erroneously (cf. Osada, Uemura & uehara,1999; Cotton & Racheli,2006).

Range: Laos, Vietnam.

<sup>4</sup> dedicated to Dr. Muhabbet Kemal, an Uighur scientist, for her invaluable contributions to the South East Asian Lepidoptera fauna, and ecology in the recent years.

***Lycaenidae******Mestore* nom. nov. (section n.) Koçak & Kemal**

*Himalaya* Koçak & Seven, 1998 (Cent. ent. Stud., Misc. Pap. 49: 4, footnote 1) is invalid as it is junior homonym of *Himalaya* Malhçtra, Capoor & Ghildiyal, 1983 (Science Cult. 49 (10): 335). *Himalaya* Koçak & Seven, 1998 is originally proposed as a section name; therefore, we propose a replacement name for it at a section level, *Mestore* (nom. nov.), in accordance with the ICZN.

The necessary name combinations are mentioned below:

- Polyommatus (Agriades (Mestore)) ellisi* Marshall, 1882 (comb.n.) Range: N.W. India  
*Polyommatus (Agriades (Mestore)) errans* (Riley, 1927) (comb.n.) Range: Tibet  
*Polyommatus (Agriades (Mestore)) jaloka* (Moore, [1875]) [type-species] (comb.n.) Range: Kashmir  
*Polyommatus (Agriades (Mestore)) janigena* (Riley, 1923) (comb.n.) Range: Tibet  
*Polyommatus (Agriades (Mestore)) kurtjohnsoni* (Balint, 1997) (comb.n.) Range: Nepal  
*Polyommatus (Agriades (Mestore)) leela* (De Nicéville, 1884) (comb.n.) Range: Ladak  
*Polyommatus (Agriades (Mestore)) morsheadi* (Evans, 1923) (comb.n.) Range: Tibet

## Replacement names for some Microlepidoptera (*Lepidoptera*)

Ahmet Ömer Koçak    Muhabbet Kemal

**Abstract:** Koçak, A. Ö. & M. Kemal, Replacement names for some Microlepidoptera (*Lepidoptera*). Cent. ent. Stud., Misc. Pap. 105: 5-7.

This article deals with the nomenclature of *Laqueus* Scoble, 1983 (*Nepticulidae*) from South Africa, *Holcoceroides* Sinev, 1986 (*Blastobasidae*), *Ursina* Sinev, 1988 (*Oecophoridae*) from East Asia, and *Notesia* Yamanaka, 1992 (*Pyrilidae*) from Taiwan and Papua New Guinea. Four replacement names are proposed for the pre-occupied names in accordance with the ICZN.

**Keywords:** *Laqueus*, *Holcoceroides*, *Sinevina*, *Ursina*, *Muhabbetana*, *Notesia*, *Bepea*, *Nepticulidae*, *Blastobasidae*, *Pyrilidae*, *Lepidoptera*, new names, South Africa, Russia, Korea, Taiwan, Indonesia, Papua New Guinea.

***Nepticulidae******Ectoedemia (Muhabbetana)* nom. nov.**

*Laqueus* Scoble, 1983 (Transv. Mus. Monogr. 2: 20) is invalid as it is junior homonym of *Laqueus* Dahl, 1870 (Amer. J. Conch. 6: 123) (Brach.). Therefore, we propose here a replacement name at subgenus level *Muhabbetana* (nom.nov.)<sup>5</sup> Koçak for *Laqueus* Scoble, 1983 nec *Laqueus* Dahl, 1870, in accordance with the ICZN.

The necessary name combinations are mentioned below:

- Ectoedemia (Muhabbetana) bicarina* Scoble, 1983 (comb.n.)

<sup>5</sup> dedicated to Dr. Muhabbet Kemal, an Uighur scientist, for her invaluable contributions to the Soutpansberg (South Africa) Lepidoptera fauna, and ecology in the recent years.



*Ectoedemia (Muhabbetana) capensis* Scoble, 1983 (**comb.n.**)  
*Ectoedemia (Muhabbetana) craspedota* (Vari, 1963) (**comb.n.**)  
*Ectoedemia (Muhabbetana) crispae* Scoble, 1983 (**comb.n.**)  
*Ectoedemia (Muhabbetana) denticulata* Scoble, 1983 (**comb.n.**)  
*Ectoedemia (Muhabbetana) digitata* Scoble, 1983 (**comb.n.**)  
*Ectoedemia (Muhabbetana) furcella* Scoble, 1983 (**comb.n.**)  
*Ectoedemia (Muhabbetana) grandinosa* (Meyrick, 1911) (**comb.n.**)  
*Ectoedemia (Muhabbetana) guerkliae* Scoble, 1983 (**comb.n.**)  
*Ectoedemia (Muhabbetana) gymnosporiae* (Vari, 1955) (**comb.n.**)  
*Ectoedemia (Muhabbetana) insulata* (Meyrick, 1911) (**comb.n.**)  
*Ectoedemia (Muhabbetana) jupiteri* Scoble, 1983 (**comb.n.**)  
*Ectoedemia (Muhabbetana) kowynensis* Scoble, 1983 (**comb.n.**)  
*Ectoedemia (Muhabbetana) limburgensis* Scoble, 1983 (**comb.n.**)  
*Ectoedemia (Muhabbetana) macrochaeta* (Meyrick, 1921) (**comb.n.**)  
*Ectoedemia (Muhabbetana) maritima* Scoble, 1983 (**comb.n.**)  
*Ectoedemia (Muhabbetana) nigrisquama* Scoble, 1983 (**comb.n.**)  
*Ectoedemia (Muhabbetana) nylstroomensis* Scoble, 1983 (**comb.n.**)  
*Ectoedemia (Muhabbetana) psarodes* (Vari, 1963) (**comb.n.**)  
*Ectoedemia (Muhabbetana) rhabdophora* Scoble, 1983 (**comb.n.**)  
*Ectoedemia (Muhabbetana) royenicola* (Vari, 1955) (**comb.n.**)  
*Ectoedemia (Muhabbetana) scabridae* Scoble, 1983 (**comb.n.**)  
*Ectoedemia (Muhabbetana) simiicola* Scoble, 1983 (**comb.n.**)  
*Ectoedemia (Muhabbetana) stimulata* (Meyrick, 1913) (**comb.n.**)  
*Ectoedemia (Muhabbetana) subnitescens* (Meyrick, 1937) (**comb.n.**)  
*Ectoedemia (Muhabbetana) umdoniella* Scoble, 1983 (**comb.n.**)  
*Ectoedemia (Muhabbetana) undatae* Scoble, 1983 (**comb.n.**)  
*Ectoedemia (Muhabbetana) wilkinsoni* Scoble, 1983 (**comb.n.**)

## ***Blastobasidae***

### ***Sinevina* nom. nov.**

*Holcoceroides* Sinev, 1986 (Trudy Zool. Inst. Leningr. 145: 65) is invalid as it is junior homonym of *Holcoceroides* Strand, 1920 (Arch. Naturgesch. 78 A12: 35) (Lepid., Cossidae). Therefore, we propose here a replacement name *Sinevina* Koçak & Kemal (nom.nov.) for *Holcoceroides* Sinev, 1986 nec Strand, 1913, in accordance with the ICZN.

The necessary name combination is mentioned below:

*Sinevina scythrella* (Sinev, 1986) (**comb.n.**) [type-species] Range: Russia.

## ***Oecophoridae***

### ***Muhabbeta* nom. nov. Koçak**

*Ursina* Sinev, 1988 (Trudy Zool. Inst. Leningr. 178: 116) is invalid as it is junior homonym of *Ursina* Jordan, 1964 (Freiberger ForschHft (Ser.C) 170: 70.) (Crustacea). Therefore, we propose here a replacement name *Muhabbeta* Koçak (nom.nov.)<sup>6</sup> for *Ursina* Sinev, 1988 (nec Jordan, 1964), in accordance with the ICZN.

The necessary name combination is mentioned below:

*Muhabbeta nigrella* (Kuznetsov, 1984) (**comb.n.**) [type-species] Range: Russia.

<sup>6</sup> dedicated to Dr. Muhabbet Kemal, an Uighur scientist, for her invaluable contributions to the Central Asian Lepidoptera fauna, and ecology in the recent years.

***Pyralidae******Bepea* nom. nov.**

*Notaspis* W. Warren, 1892 (Ann. Mag. nat. Hist. (6) 9: 297) is invalid, as it is junior homonym of *Notaspis* Walker, 1864 (Entomologist's. Mag. 2 (1): 37) (Hymenopt.), and *Notaspis* Hermann, 1804 (Mém. Aptér. ,12) (Arachn.). Yamanaka (1992, Lepid. Taiwan 1 (2): 16) proposed a replacement name *Notesia* for *Notaspis* Warren, 1892. However, *Notesia* Yamanaka, 1992 is also invalid, as it is junior homonym of *Notesia* Casey, 1922 (Mem. Col. 10: 331) (Coleopt.). Therefore, we propose here a replacement name *Bepea* Koçak & Kemal (nom.nov.) for *Notesia* Yamanaka, 1992 (nec Casey, 1922), in accordance with the ICZN.

The necessary name combinations are mentioned below:

*Bepea tranquillalis* (Lederer, 1863) (**comb.n.**) [type-species] Range: Ternate, Papua New Guinea.

*Bepea pyraustalis* (Strand, 1918) (**comb.n.**) Range: Taiwan.

## Notes on the nomenclature of Asiatic *Noctuidae* (*Lepidoptera*)

Ahmet Ö. Koçak    Muhabbet Kemal

**Abstract:** Koçak, A. Ö. & M. Kemal, Notes on the nomenclature of Asiatic *Noctuidae* (*Lepidoptera*). *Cent. ent. Stud., Misc. Pap.* 105: 7-8.

This article deals with the nomenclature of *Oligonyx* Sugi, 1992, *Fabiania* Hreblay & Ronkay, 2000 (*Noctuidae*) from East Asia. Replacement names are proposed for the pre-occupied names in accordance with the ICZN.

**Keywords:** *Oligonyx*, *Fabiania*, *Osmanosizikia*, *Uighuria*, *Noctuidae*, *Lepidoptera*, new names, South Africa, Russia, Korea, Taiwan.

***Noctuidae******Osmanosizikia* nom. nov.**

*Oligonyx* Sugi, 1992 is proposed in Inoue & Kawabe, *Moths of Japan* 1: 780. This name is however invalid, as it is junior homonym of *Oligonyx* Saussure, 1869 (Mit. schweiz. ent. Ges. 3: 58) (Orthopt.). Therefore, we propose here a replacement name *Osmanosizikia* Koçak & Kemal (nom.nov.) for *Oligonyx* Sugi, 1992 (nec Saussure, 1869), in accordance with the ICZN.

The necessary name combination is mentioned below:

*Osmanosizikia vulnerata* (Butler, 1878) (**comb. n.**) [type-species] Range: Russia, Japan.

***Uighuria* nom. nov.**

*Fabiania* Hreblay & Ronkay, 2000 (*Insecta Koreana* 17 (1/2): 24) is invalid, as it is junior homonym of *Fabiania* Silvestri, 1926 (*Riv. Ital. Paleont.* 32: 20) (*Foraminifera*). Therefore, we propose here a replacement name *Uighuria* Koçak & Kemal (nom.nov.) for *Fabiania* Hreblay & Ronkay, 2000 (nec Silvestri, 1926), in accordance with the ICZN.

The necessary name combinations are mentioned below:

*Uighuria marki* (Hreblay & Ronkay,2000) (**comb. n.**)

*Uighuria pulla* (Hreblay & Ronkay,2000) (**comb. n.**)

*Uighuria satellitia* (Hreblay & Ronkay,2000) (**comb. n.**)

Range: Taiwan.

### Literature:

Hreblay,M. & L.Ronkay, 2000, New Noctuidae species and Subspecies from Taiwan and the Adjacent Areas II (Lepidoptera). *Insecta Koreana* 17 (1/2): 1-38, figs.

Sugi, S.,1992, Moths of Japan Volume 1. Tokyo.

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